flected than the other Colours red and violet, and ſo of the reſt. But to make theſe Experiments the more manifeſt, ſuch Bodies ought to be choſen as have the fulleſt and moſt vivid Colours, and two of thoſe Bodies are to be compared together. Thus, for inſtance, if Cinnaber and *ultra* marine blue, or ſome other full blue be held together in the homogeneal Light, they will both appear red, but the Cinnaber will appear of a ſtrongly luminous and reſplendent red, and the *ultra* marine blue of a faint obſcure and dark red; and if they be held together in the blue homogeneal Light they will both appear blue, but the *ultra* marine will appear of a ſtrongly luminous and reſplendent blue, and the Cinnaber of a faint and dark blue. Which puts it out of diſpute, that the Cinnaber reflects the red Light much more copiouſly than the *ultra* marine doth, and the *ultra* marine reflects the blue Light much more copiouſly than the Cinnaber doth. The ſame Experiment may be tryed ſucceſsfully with red Lead and Indico, or with any other two coloured Bodies, if due allowance be made for the different ſtrength or weakneſs of their Colour and Light.

And as the reaſon of the Colours of natural Bodies is evident by theſe Experimenrs, ſo it is further confirmed and put paſt diſpute by the two firſt Experiments of the firſt Book, whereby 'twas proved in ſuch Bodies that the reflected Light which differ in Colours do differ alſo in degrees of refrangibility. For thence it's certain, that ſome Bodies reflect the more refrangible, others the leſs refrangible rays more copiouſly.

And

And that this is not only a true reaſon of theſe Colours, but even the only reaſon may appear further from this conſideration, that the Colour of homogeneal Light cannot be changed by the reflexion of natural Bodies.

For if Bodies by reflexion cannot in the leaſt change the Colour of any one ſort of rays, they cannot appear coloured by any other means than by reflecting thoſe which either are of their own Colour, or which by mixture muſt produce it.

But in trying Experiments of this kind care muſt be had that the Light be ſufficiently homogeneal. For if Bodies be illuminated by the ordinary priſmatick Colours, they will appear neither of their own day-light Colours, nor of the Colour of the Light caſt on them, but of ſome middle Colour between both, as I have found by Experience. Thus red Lead (for inſtance) illuminated with the ordinary priſmatick green will not appear either red or green, but orange or yellow, or between yellow and green accordingly, as the green Light by which 'tis illuminated is more or leſs compounded. For becauſe red Lead appears red when illuminated with white Light, wherein all ſorts of rays are equally mixed, and in the green Light all ſorts of rays are not equally mixed, the exceſs of the yellow-making, green-making and blue-making rays in the incident green Light, will cauſe thoſe rays to abound ſo much in the reflected Light as to draw the Colour from red towards their Colour. And becauſe the red Lead reflects the red-making rays moſt copiouſly in proportion to their number, and next after them the orange-making and yellow-making rays; theſe rays in